IN THE CLAIMS

1. (original) Method of diagnosing in an individual recent exposure to an agent which is a pathogen, vaccine or any other moiety which induces a cellular response, said method comprising determining whether the T cells of the individual recognise a protein from said agent having a length of at least 30 amino acids, to a greater extent than one or more peptide epitopes from the agent, a greater extent of recognition of the protein indicating that the individual has recently been exposed to the agent.

2. (original) Method according to claim 1 comprising determining whether T cells of the individual exhibit a greater reaction to a protein from said agent having a length of at least 30 amino acids than to one or more peptide epitopes from the agent, a greater reaction indicating that the individual has recently been exposed to the agent.

3. (previously presented) Method according to claim 1 wherein determining whether the T cells recognise said protein is performed by employing an analogue of the protein which is recognised by T cells which recognise said protein, wherein said analogue has a length of at least 30 amino acids.

4. (previously presented) Method according to claim 1 wherein determining whether the T cells recognise said peptide epitope is performed by employing an analogue of the peptide epitope which analogue is recognised by T cells which recognise said peptide epitope.

5. (previously presented) Method according to claim 1 comprising:

(i) contacting a first population of T cells from the individual with (a) one or more peptide epitopes from the agent, or (b) an analogue of said peptide(s) which is recognised by T cells that recognise said peptide(s), and determining the reaction of the T cells to the peptide(s) or analogue(s), and

(ii) contacting a second population of T cells from the individual with (a) a protein from the agent, or (b) an analogue of said protein which is recognised by T cells

that recognise said protein, wherein the protein or analogue has a length of at least 30 amino acids and determining the reaction of the T cells to the protein or analogue.

6. (previously presented) Method according to claim 1 in which the individual is diagnosed as having been exposed to the agent recently if there is substantially no reaction of the T cells to the peptide epitope or an analogue thereof.

7. (previously presented) Method according to claim 1 in which the protein or its analogue comprises at least the amino acid sequence of the peptide epitope or an analogue thereof, which analogue is recognised by T cells which recognise said peptide epitope.

8. (previously presented) Method according to claim 1 in which the peptide epitope, or the analogue of the peptide epitope, has a length of 8 to 29 amino acids.

9. (previously presented) Method according to claim 1 wherein whether or not the T cells recognise a pool of a least 4 peptide epitopes, or analogues thereof, is determined.

10. (previously presented) Method according to claim 1 wherein a pool of peptide epitopes and/or analogues which together represent all of the possible epitopes from the protein is used.

11. (previously presented) Method according to claim 1 in which during detection of the response of the T cells to the protein, or the analogue of the protein, antigen presenting cells are present which are capable of processing the protein and presenting it to the T cells.

12. (previously presented) Method according to claim 1 wherein the pathogen is an intracellular pathogen or the vaccine is against an intracellular pathogen.

13. (previously presented) Method according to claim 12 wherein the pathogen is HPV, HIV, SIV, HCV, a Chlamydia species, HBV, EBV, CMV, VZV, HSV, Legionella, S. typhi, P. falciparum, Leishmaniasis, M. leprae, influenza virus, foot and mouth virus, a Toxoplasma species, a Brucella species, a Cryptococcus species, a Candida species or an Aspergillus species; or the vaccine is against any of these pathogens.

14. (previously presented) Method according to claim 12 wherein the pathogen is *M. tuberculosis* or the vaccine is against *M. tuberculosis*.

15. (previously presented) Method according to claim 1 wherein the protein and/or peptide epitope(s) is from ESAT-6 or CFP10.

16. (previously presented) Method according to claim 15 wherein the peptide(s) is chosen from one or more of the following peptide epitopes:

MTEQQWNFAGIEAAA (SEQ ID NO:1),
WNFAGIEAAASAIQG (SEQ ID NO:2),
IEAAASAIQGNVTSI (SEQ ID NO:3),
SAIQGNVTSIHSLLD (SEQ ID NO:4),
NVTSIHSLLDEGKQS (SEQ ID NO:5),
HSLLDEGKQSLTKLA (SEQ ID NO:6),
EGKQSLTKLAAAWGG (SEQ ID NO:7),
LTKLAAAWGGSGSEA (SEQ ID NO:8),
AAWGGSGSEAYQGVQ (SEQ ID NO:9),
SGSEAYQGVQQKWDA (SEQ ID NO:10),
YQGVQQKWDATATEL (SEQ ID NO:11),
QKWDATATELNNALQ (SEQ ID NO:12),
TATELNNALQNLART (SEQ ID NO:13),
NNALQNLARTISEAG (SEQ ID NO:14),
NLARTISEAGQAMAS (SEQ ID NO:15),
ISEAGQAMASTEGNV (SEQ ID NO:16),
QAMASTEGNVTGMFA (SEQ ID NO:17),

MAEMKTDAATLAQEA (SEQ ID NO:18),
TDAATLAQEAGNFER (SEQ ID NO:19),
LAQEAGNFERISGDL (SEQ ID NO:20),
GNFERISGDLKTQID (SEQ ID NO:21),
ISGDLKTQIDQVEST (SEQ ID NO:22),
KTQIDQVESTAGSLQ (SEQ ID NO:23),
QVESTAGSLQGQWRG (SEQ ID NO:24),
AGSLQGQWRGAAGTA (SEQ ID NO:25),
GQWRGAAGTAAQAAV (SEQ ID NO:26),
AAGTAAQAAVVRFQE (SEQ ID NO:27),
AQAAVVRFQEAANKQ (SEQ ID NO:28),
VRFQEAANKQKQELD (SEQ ID NO:29),
AANKQKQELDEISTN (SEQ ID NO:30),
KQELDEISTNIRQAG (SEQ ID NO:31),
EISTNIRQAGVQYSR (SEQ ID NO:32),
IRQAGVQYSRADEEQ (SEQ ID NO:33),
VQYSRADEEQQQALS (SEQ ID NO:34),
ADEEQQQALSSQMGF (SEQ ID NO:35),

or an analogue thereof which is recognised by a T cell which recognises the peptide epitope.

17. (previously presented) Method according to claim 1 wherein recognition of the one or more peptide epitopes and the protein is determined by detecting secretion of a cytokine from the T cells.

18. (original) Method according to claim 17 in which the cytokine is IFN-γ.

19. (previously presented) Method according to claim 17 in which the cytokine is detected by allowing the cytokine to bind to an immobilised antibody specific to the cytokine and then detecting the presence of the antibody/cytokine complex.

Claims 20-22 (canceled)

23. (previously presented) A product comprising a protein from an agent which is a pathogen, vaccine or any other moiety which induces a cellular response, said protein having a length of at least 30 amino acids, and one or more peptide epitopes from the agent for separate, simultaneous or sequential use in a method of diagnosing in an individual recent exposure to the agent, said method comprising determining whether the T cells of the individual recognise the protein to a greater extent than the peptide epitope(s), a greater extent of recognition of the protein indicating that the individual has recently been exposed to the agent.

24. (previously presented) Method of treating an individual comprising administering to an individual diagnosed as having been exposed recently to a pathogen by a method according to claim 1, a product which prevents or treats the condition caused by the pathogen.

Claim 25 (canceled)

26. (previously presented) Method according to claim 24 wherein the pathogen is *M. tuberculosis* and/or the product is rifampicin, isoniazid, pyrazinamide, ethambutol, streptomycin, para-amino-salicyclic acid, kanamyin, capreomycin, ethionamide, cycloserine, thiacetazone or a flouroquinolone, or an analogue of such product.

27. (previously presented) A kit for carrying out the method of claim 1 comprising (i) said one or more peptide epitopes and (ii) said protein, wherein any of said one or more peptide epitopes and/or said protein may be substituted by an analogue which is recognized by T cells which recognize the peptide epitope or protein, and optionally also a means to detect whether T cells recognize (i) and (ii).

28. (previously presented) A kit according to claim 27 which also comprises a product which prevents or treats the condition caused by the pathogen which can be diagnosed using said one or more peptides or said protein.

Claims 29-94 (canceled)

95. (previously presented) A product according to claim 23 wherein any of said one or more peptide epitopes or said protein is substituted by an analogue which is recognized by T cells which recognise the peptide epitope or protein.